Acronyms

AAMA	American Automobile Manufacturer's Association
AFB	Air Force Base
ANSI	American National Standards Institute
API	American Petroleum Institute
APP	Affirmative Procurement Program
ARNG	Army National Guard
ASTM	American Society for Testing and Materials
CASUs	Cooperative Administrative Support Units
CD-ROM	Compact Disk-Read Only Memory
CFR	Code of Federal Regulations
CID	Commercial Item Description
CMLS	GSA's Centralized Mailing List Service
CPG	Comprehensive Procurement Guidelines
DAMES	Defense Automated Message Entry System
DLA	Defense Logistics Agency
DLSC	Defense Logistics Service Center
EDI	Electronic Data Interchange
EPA	Environmental Protection Agency
EPG	Environmental Products Guide
FAC	Federal Acquisition Circular
FAR	Federal Acquisition Regulation
FEDSTRIP	Federal Standard Requisitioning and Issuing Procedures
FEE	Federal Environmental Executive
FPMR	GSA's Federal Property Management Regulations
FR	Federal Register
GGBF	Ground Granulated Blast Furnace
GNP	Gross National Product
GPO	Government Printing Office
GSA	General Services Administration
HDPE	High Density Polyethylene
IFMS	Interagency Fleet Management System
ILSAC	International Lubricant Standardization and Approval Committee
JCP	Joint Committee on Printing
KSC	Kennedy Space Center
LDPE	Low Density Polyethylene
MUFFIN	Multi-user File for Interagency **News**
NIST	National Institute of Standards and Technology
NNMC	National Navy Medical Center
OEMs	Original Equipment Manufacturers
OFPP	Office of Federal Procurements Policy
OMB	Office of Management and Budget
OSWER	EPA's Office of Solid Waste Emergency Response
P.L.	Public Law
PCIE	President's Council On Integrity and Efficiency
PET	Polyethylene Terephthalate
PMB	GSA's Property Management Branch
PVC	Polyvinyl Chloride
QPL	Qualified Products List
RCRA	Resource Conservation and Recovery Act
RFP	Request for Proposal
RMAN	Recovered Materials Advisory Notice
RRRP	Resource Recovery and Recycling Program
SF0	Solicitation for Offers
U.S.C.	United States Code
USPS	U.S. Postal Service
VMF	Vehicle Maintenance Facility

Part 3

The Role of the Federal Environmental Executive and Agency Environmental Executives

A Message From the Federal Environmental Executive

Executive Order 12873 demonstrates a unique and historically significant commitment on the part of both the President and the Vice-President to environmentally friendly approaches to recycling. waste management, acquisition, and procurement. As a result of this Executive Order and the implementation now underway, the Federal community will dramatically increase (I) waste reduction at the source. (2) recycling, and (3) the procurement of recycled products. This will be done in the most economically sound and environmentally efficient way possible. The Federal Environmental Executive has been given a task by the President to come up with ways to make that happen quickly. Both the President and the Vice President are pleased with the success the Federal community has already had implementing the executive Order. But we all know we have a long way to go.

Successful recycling, as the word suggests, is a three-phase cyclical process. It includes, (I) !he collection and separation of used but recyclable materials. Those materials are then (2) processed and manufactured into new products, replacing the need for some virgin materials. finally, as these products are returned to the marketplace as new consumables, they are (3) purchased and used, continuing the cycle. If we don't close the circle by buying recycled content products, we aren't really recycling.

Recycling is not only the right thing to do, it makes sound economic sense on many different levels. Moreover, the government has an obligation to lead the way by buying products manufactured from the materials it recovers - to "close the circle" among the recycling, manufacturing, and purchasing sectors.

Towards that end, each Federal department has named an Agency Environmental Executive to work internally, and with the Federal Environmental Executive to assure complete and rapid implementation of the Executive Order. Although the Federal Environmental and Agency Executives help to establish the overall battle plan, as demonstrated by the list of the White House Closing the Circle Award winners in Part 8 and throughout this document, it is the thousands of Federal employees, from all over the country, who will take this challenge on and make the process a success. As a team, the entire Federal community will make the ideals of the Executive Order a reality. We need each others help!

Fran McPoland
Federal Environmental Executive

Sec. 301.

Federal Environmental Executive. (a) A Federal Environmental Executive shall be designated by the President and shall be located within the Environmental Protection Agency ("EPA"). The Federal Environmental Executive shall take all actions necessary to ensure that the agencies comply with the requirements of this order and shall generate an annual report to the Office of Management and Budget ("OMB"), at the time of agency budget submissions, on the actions taken by the agencies to comply with the requirements of this order. In carrying out his or her functions, the Federal Environmental Executive shall consult with the President's Chairman of the Council on Environmental Quality.

Sec. 302.[3]

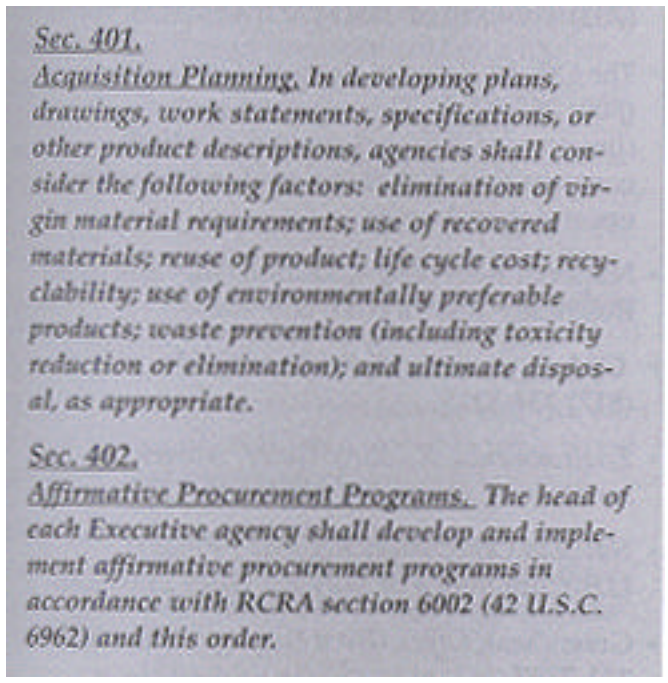
Agency Environmental Executives. Within 90 days after the effective date of this order, the head of each Executive department and major procuring agency shall designate an Agency Environmental Executive from among his or her staff, who serve at a level no lower than at the Deputy Assistant Secretary level or equivalent.

A List of Agency Environmental Executives can be found in Appendix B

GREENING THE GOVERNMENT

Part 4

Acquisition Planning and Affirmative Procurement Programs


Sec. 401.
Acquisition Planning. In developing plans, drawings, work statements, specifications, or other product descriptions, agencies shall consider the following factors: elimination of virgin material requirements; use of recovered materials; reuse of product; life cycle cost; recyclability; use of environmentally preferable products; waste prevention (including toxicity reduction or elimination); and ultimate disposal, as appropriate.

Sec. 402.
Affirmative Procurement Programs. The head of each Executive agency shall develop and implement affirmative procurement programs in accordance with RCRA section 6002 (42 U.S.C. 6962) and this order.

Acquisition Planning

The concept of **Acquisition Planning** is very general and encompassing. It simply means agencies need to consider a multitude of environmental factors before acquisition occurs. These factors include: eliminating unnecessary virgin material requirements, and specifying the use of recovered materials instead (specification revision may be necessary); considering recyclability and product environmental preferability, and reusing products if possible; preventing waste; and life cycle costs, including ultimate disposal costs; etc.' In planning for acquisitions, those involved need to place serious emphasis up front on eliminating waste to save money, increase efficiency, and to reduce pollution. This is consistent with the "green hierarchy" : reduce, reuse, and recycle, in that order. (Part 6 treats Waste Reduction and Environmentally Preferable Products in greater detail. Also, Part 4 focuses primarily on topics related to recycling and products containing recovered material.)

To assist in the planning phase under the Executive Order and RCRA, each Federal agency must develop and implement an Affirmative Procurement Program (API'). APPs are written statements as to how agencies plan to preferentially procure EPA-designated items. These plans follow a specific format laid out in the Executive Order, and provided herein. Parts 4 and 5 of this document will focus on **what** a recycled product is, what should be considered

in buying recycled, and what constitutes an APP. The Model itself has been loaded into Enviro$ense at EPA.' and on the Web site of the Federal Environmental Executive "www.ofee.com."

What Should Agencies Consider When Buying Recycled Products?

Agencies should keep in mind four factors when preparing to purchase recycled content products: quality/performance, availability, cost, and compatibility with an existing recycling program.

Quality/Performance

Today, both increased demand and major improvements in technology have resulted in recycled content products that are competitive in quality/performance or even superior to virgin goods. Agencies such as GSA and the GPO maintain Qualified Products Lists for products meeting their performance specifications. In addition, a number of private organizations (e.g., Green Seal and Scientific Certification Systems) also certify product quality, performance, and environmental claims. If questions persist, agencies should consult other agencies using the product and/or agencies also should consider blind tests comparing those products to virgin material equivalents. Test results should be kept on file and shared with vendors, using agencies, and other organizations.

Availability

Some recycled content products are available throughout the country, while others are available only in certain regions. Because demand for each product varies, manufacturers and vendors may need additional lead time to fill an order. This is another important reason to create steady demand for recycled goods.

To research the availability of various recycled content products, consult these resources:

Source Lists for EPA-designated items. The RCRA Hotline provides information and distributes source lists for many of the EPA-designated items. Call the RCRA Hotline at (800) 424-9346 or TDD (800) 553-7672 for the hearing impaired. In Washington, DC, call (703) 412-9810 or TDD (703) 412-3323.

The Official Recycled Products Guide at (800) 267-0707. This comprehensive directory of recycled content products contains over 5000 listings of manufacturers and distributors.

National Recycling Coalition/Buy Recycled Business Alliance (703) 683-9026.

GSA *Environmental Products Guide,* (817) 334-5215.

Environmental Resource Guide; American Institute of Architects, (202) 626-7300.

National Office Paper Recycling Project; U.S. Conference of Mayors, (202) 293-7330.

Green Seal, Office Green *Buying Guide (202)* 331-7337.

Trade associations, trade shows and exhibits (see Appendix C for additional recycled product sources and Appendix D for information on where agencies can buy recycled content products).

State and local buying guides and recycled products guides prepared by state or local recycling offices.

cost

For some recycled products their cost is lower when comparing them to their virgin counterparts. Prices for both virgin and recycled products depend on the specific product, the

'EPA's Enviro$ense is on the World Wide Web (Internet): http://es.inel.gov

economy, geographic considerations, and many other factors.

Whenever possible, cost should be calculated over the life of the item, not just for initial, up-front cost. When comparing alternative products, the initial cost of the acquisition, as well as resale value, disposal costs, replacement costs, operational costs, etc., must be considered in the analysis. A product having a higher initial cost may have lower operational cost or a higher resale value and could prove to be a better value and more cost-effective compared to the alternatives. This difference may only become apparent after a (complete) life-cycle cost analysis has been performed. For example, the use of some recycled content materials, like plastic lumber in decking or park benches, can reduce maintenance or replacement costs. This is because the material, which can be initially more expensive, lasts years longer and can eliminate the use of costly and possibly toxic wood cleaning and preserving chemicals.

The best way to control costs is to use performance specifications, comparison shopping, bulk purchases, competitive bidding, and life-cycle costing.

Cooperative Purchasing

Increasing the number of bidders and the number of agencies participating in the purchase of recycled content products can help reduce the unit prices for these products. A variety of public agencies can combine their purchasing power to save money on a number of products. Schools, colleges, libraries, and other public institutions are ideally suited to cooperative purchasing. For example, a number of Federal agencies in some regions of the country, coincidentally located in GSA-controlled Federal buildings, have formed Cooperative Administrative Support Units (CASUs) designed to share a variety of costs, such as duplicating services. Some of the advantages of cooperative purchasing are:

Lowers Unit Costs-By combining purchases and buying in bulk, agencies may find unit prices for recycled products to be lower than if each agency purchased individually.

Lowers Administrative Costs-By combining purchases, only one Government agency (the lead agency) bears the administrative costs of preparing, advertising, and analyzing the bids and administering the contract.

Increases Volume of Recycled Purchases-Because more agencies are involved, more recycled products will be purchased.

Encourages More Organizations to Participate in the Buy Recycled Effort- Cooperative purchasing encourages participating agencies to buy other recycled products.

Increases Availability of Recycled Products- In some cases, manufacturers may require a minimum order before shipping recycled products. Cooperative purchasing can help meet minimum order requirements.

Establishes Common Definitions, Percentages, and Standards-When various Government agencies buy from the same contract, definitions, percentages, and standards are the same. This allows manufacturers to produce stock items instead of specialty items.

When comparing the cost and/or value of recycled paper to virgin paper, agencies should compare papers of the same quality and grade. For example, in the past, several agencies have chosen high-quality recycled bond paper when they previously had used a commodity-grade virgin paper and then were surprised by the price differential. When the grade variable is ignored, it's easy to draw the wrong conclusion that the price difference is the result of recycled content only.

Creates Closed-Loop Opportunities
These represent opportunities for agencies to save money and resources by establishing closed-loop recycling and collections systems (see "Closed-Loop" discussion later in this section).

Compatibility with Recycling Collection Program

Purchasing officials should work closely with recycling program coordinators to be sure products purchased can be recycled in existing internal or external recycling programs and life-cycle costs are continuously reflected in decision-making.

Agencies can buy a variety of paper products which are recyclable in office paper collection programs and benefit the purchasing agency For example, switching from yellow to white ledger and legal pads will increase the value of recyclable wastepaper. Agencies can replace difficult to recycle plastic window envelopes with open or glassine window envelopes. Mailing labels and other sticky products should be water soluble to permit recycling. Reports should be printed on recyclable paper and always double-sided (generally non-glossy without glue bindings). These and other techniques can improve the value of waste paper by eliminating contaminants. In fact, this may be necessary because some programs are set up to allow only those materials having the highest resale value.

Recycled content and recyclability may conflict, depending on the products' makeup and the type of office collection program in place. Paper with high recycled content (as much as 100 percent postconsumer material) can be available at costs lower than virgin or other recycled papers. Unfortunately some of this type of paper can have a high "groundwood" content. Groundwood-content paper, however, should not be recycled with high-grade white office paper, although it can be recycled with newspapers or mixed paper, depending on the local program (see article below). Agencies must decide between higher recycled content and recyclability of their paper, unless they have the option of establishing separate collections for high-grade paper and mixed paper.

Most newspapers printed in the United States today are printed on groundwood paper, as is the Federal Register and many Internal Revenue Service (IRS) publications. Groundwood paper is made from "ground wood pulp," derived from wood fiber via a mechanical pulping process (rather than a chemical pulping process). The groundwood pulping process uses fewer chemicals than chemical-based paper production (also known as the kraft process) and has a high fiber yield (very little waste). However, the groundwood pulping process is very energy intensive and can be difficult to recycle..

To obtain copier paper that meets or exceeds the standards in the Executive Order, order:

- GSA NSN 7530-01-335-2623 for 8-l/2 x 11" or NSN 7530-01-334-7817 for 8-l/2 x14
- GPO JCP O-65 for 20 percent post consumer fiber content or JCP O-70 for 100 percent recycled content with at least 50 percent post-consumer fiber (groundwood).

[6]*Groundwood is considered a contaminant in recycling high-grade white ("groundwood-free") papers because it introduces lignin (which causes yellowing) and shorterfibers. This limits the end-use applications to lower value products (e.g., corrugating medium, boxboard, molded pulp, tissue, etc.) rather than re-use as office/computer paper. As a result, most high-grade recycled paper mills want paper with zero groundwood contamination.*

In Federal recycling programs, when groundwood is mixed with groundwood-free papers, the bale is "downgraded,"(see note on page 48) reducing its value, often significantly. (Under the current GSA contract which covers DOE's Forrestal Building, (see box on next page), such downgrading can mean a reduction from $150 to $10 per ton.) Groundwood papers can be mixed with groundwood-free papers to produce lower-value paper products. Groundwood papers used in copiers and laser printers, and then recycled as newsprint, present a whole other set of challenges to most newsprint de-inking systems. The plastic-based copier toner and laser imaging ink are more difficult to remove from groundwood papers than the traditional water-based inks used for newsprint. Some newsprint deinking mills can take up to 10% groundwood with laser ink, but many cannot.

An Evaluation of the Department of Energy's Internal Recycling Program

In an effort to help demonstrate the linkage between federal procurement efforts and agencies' recycling, waste reduction, and pollution prevention efforts, the DOE invited the Federal Environmental Executive to conduct a review of DOE's internal recycling program.

OFEE, in cooperation with the DOE's Agency Environmental Executive, conducted an analysis of paper usage and waste at DOE's Forrestal Building in Washington, D.C. The review considered the life-cycle impact of paper usage, with particular emphasis on DOE's effort to use groundwood paper to comply with the mandate in Executive Order 12873 that federal agencies use printing and writing paper containing at least 20% postconsumer content. The review also evaluated the potential for the Department to establish a corrugated paper recycling program.

The OFEE review was conducted in June 1995. The analysis contains insights into opportunities currently available to federal agencies to maximize recycling revenues and efficiencies. These opportunities have emerged due to recent dramatic increases in market values for collected recyclables, and the fact that federal agencies and departments are now authorized to retain revenues from their own recycling efforts. Findings and conclusions from the report are summarized below.

Groundwood Paper Conclusions

While the DOE's program to utilize groundwood paper was originally in step with market conditions, it may now be appropriate to revamp the program in light of current law and recent changes in the recycling market:

Public Law 103-329, Sec. 608, effective October 1, 1994, allows federal agencies to receive and distribute recycling revenue for designated uses, including the promotion of source reduction and recycling programs. Therefore, for the first time, DOE can receive and utilize the money earned from a collection program. In the past, these funds were retained by the General Services Administration (GSA) and distributed to Federal Day Care facilities,

Due to the difficulty of processing laser printed groundwood papers in traditional recycling programs, and because the market price paid to the Government for collected high grade white paper has more than quadrupled in the past year, DOE stands to lose as much as $113,000 a year in potential revenue by not using recycled high grade white paper,

The price differential between groundwood paper and high grade white paper manufactured with 20% postconsumer.content (as required by Executive Order 12873) has narrowed significantly in the past year. GPO reports that the current price per carton (approximately 5,000 sheets, weighing #50) for groundwood is $37, while a carton of high grade white paper (20% post consumer) is $38.

In conclusion, a decision to utilize a non-groundwood, 20% postconsumer recycled content paper would be in the best overall interests of both the DOE and the Federal recycling program. Such a move would produce a net revenue of approximately $99,000 annually for the Forrestal Building, even if the current recycling collection system is not upgraded.

This review, represents a "snapshot" in time July, 1995.

Closed-Loop Systems

Using a closed-loop system, Government agencies (individually or in cooperation with other governmental and non-governmental entities) setup programs to collect recyclable materials and then either (a) buy back the recycled products made from those materials or(b) simply offset the costs of purchasing products by a credit for the value of the collected materials. What are the benefits to these options? The system guarantees markets for recyclable materials by stabilizing the demand for recycled products at a high level. Organizations instituting closed-loop systems reduce costs and create a direct link between purchasing recycled products and reducing the volume of waste.

Beyond the resource-based benefits described above, closed-loop recycling offers another type of long-term economic potential for Federal, state, and local governments. Governments and businesses at various levels, working in concert with each other, might be more likely to draw "green" industries (e.g., recycled paper mill or other recycled products manufacturers) to their locale, creating jobs and helping the local economy.

The U.S. Postal Service (USPS) is using re-refined motor oil in more than 100,000 vehicles (more than one-half of its fleet). In 1994 alone, the postal service used half-a-million quarts of re-refined oil nationwide. Some USPS Vehicle Maintenance Facilities have also implemented a closed-loop recycling program whereby the used oil is collected, re-refined, and sold back to the postal service. The closed-loop recycling system can save up to five cents per gallon. This translated to a savings of $6,250 for 1994 alone. Reduced administration and vendor costs have translated into savings, as only one contract and one vendor are used. These contracts should specify conditions for purchase as well as used oil pick-up for re-refining.

Affirmative Procurement Programs

RCRA 5 6002 (a and i) and Executive Order 12873 (5 402) require Federal agencies to develop Affirmative Procurement Programs (APE's) for EPA-designated items when purchases of these items exceed $10,000 in a fiscal year. The purpose of the program is to help agencies plan their acquisitions in accordance with the Executive Order and RCRA, then track and report their success rate in achieving their procurement goals. In this way, the APP is linked to the acquisition planning phase. The development of an APP is key to expanding the use of recovered materials. As described in the Executive Order and RCRA § 6002, an APP is an agency's strategy for maximizing its purchases of products designated by EPA. Within one year

after EPA designates a product, procuring agencies must establish an affirmative procurement program for that item. In addition, Federal agencies must revise their specifications to require the use of recovered materials to the maximum extent possible without jeopardizing the intended end use of the products. EPA recommends each procuring agency develop one overall API' identifying which designated products the agency purchases and provides for incorporating new products designated by EPA in the future.

At a minimum, RCRA requires APP to consist of the following four elements:

Preference Program-Agencies must institute practices and procedures favoring the specification and procurement of recycled content products. Procurement methods may include the use of minimum content standards (identifying the minimum recovered content an item should contain), a case-by-case procurement, or an equivalent approach. If the procuring agency is unable to acquire the item within the limitations described in RCRA, it may specify different (usually lower) minimum content standards for specific singular procurement actions. The content standards may need to be changed if the agency determines it consistently can't procure the designated item using the standards previously established. When minimum content standards are inappropriate, a procuring agency should pursue alternative approaches, such as establishing a service contract for remanufacturing or reconditioning the designated product. EPA's recommendations for content levels and other approaches are found in the Recovered Materials Advisory Notice (RMAN).

Promotion Program-Agencies must actively promote their desire to buy recycled products. Promotion should be internal as well as external. Internal promotion can consist of activities, such as wide distribution of copies of an agency's affirmative procurement policy, articles in agency newsletters, workshops to educate employees, and using logos/recycling statements on official stationery and publications. Most importantly, the message must reach facility operators, procurement officials, supply and requirements personnel, and individual users who buy materials or products with a government credit card. Examples of external promotion are publishing articles in trade journals, participating in vendor shows and trade fairs, placing statements in solicitations, and discussing an agency's procurement program at bidders' conferences. Bidders' lists should be expanded to include manufacturers of recycled products.

Estimation, Certification, and Verification-Pursuant to Federal Acquisition Circular (FAC) 90-27, agencies will obtain certifications and estimates for the recycled content of products being purchased. This FAC, implementing RCRA § 6002(i)(2)(c), requires offerors or bidders on EPA or agency designated item procurements to identify the designated items offered and the estimated percentage of recovered material in them. Further, contractors must certify the contents of the actual designated items used or delivered. The agencies verify these estimates and certifications through their normal quality control/assurance procedures. (See Appendix F for FAC 90-27 information).

Annual Review and Monitoring-Agencies must ensure they are using the highest possible percentage of recovered materials available and be aware of the prevailing technological capabilities. RCRA § 6002 requires the Office of Federal Procurement Policy (OFPP) to supply supporting documentation to Congress every two years on agency actions to implement RCRA. In addition, EO 12873 requires that the Federal Environmental Executive report to OMB annualy on an agency's actions to implement the Order.

The OFPP and the Federal Environmental Executive have worked closely together to com-

bine and streamline the reporting requirements of RCRA and EO 12873. To date, streamlining efforts have resulted in saving more than 200,000 staff hours annually, completely eliminating the agency's requirement for a second report, and allowing agencies to progressively collect annual procurement data rather than at the end of the fiscal year.

Additional savings have been realized for the agency's by capturing requisition data at the supply centers rather than from the individual recipients of the materials. For those facilities who requisition CPG items from one of the Federal Supply Centers operated by GSA, GPO, DLA, or DOD, the annual procurement survey for those items will be reported for them by the supply center.

Future biennial reports to Congress will be generated from the data reported annually by agencies to both of the above offices. The reporting instructions are generally sent to each agency around mid-October and the reports are due by the end of February.

Waivers

RCRA 5 6002 allows procuring agencies to choose not to buy a recycled product if the price is unreasonable, if there is inadequate competition, if the products are unavailable within a reasonable period of time, or if they do not meet reasonable performance standards. Executive Order 12873 (Sec. 402) requires the Agency Environmental Executive to document the basis for failing to purchase designated items and to report this to the Federal Environmental Executive.

Model Affirmative Procurement Program

The Federal Environmental Executive staff has reviewed the APPs submitted thus far by the Executive agencies for the first five items designated by the EPA. This review process represents only the first step!

Closing the Circle Award Winner

Region Five of the General Services Administration (GSA) and Environmental Protection Agency (EPA) jointly developed and conducted an effective training program (Affirmative Procurement Outreach Program) for procuring materials containing recycled content. Mr. Paul Ruesch, EPA, and Ms. Paula Ure, GSA, designed this federal procurement training initiative to encourage full compliance with President Clinton's Executive Order 12873 and with RCRA 6002. Together, these individuals completed over 14 GSA procurement training sessions to over 700 Federal Procurement Officers across Region Five. As a result, more Federal Agencies are purchasing and using products containing recycled content, thereby advancing national pollution prevention policies.

The Executive Order requires that APE's be constructed in such a manner as to allow for future expansion as additional items are included in the CPG. As new items are identified by EPA, an agency has 12 months from the final notice to update their APP. EPA has currently designated 24 items with 13 new items identified for inclusion in the Guidelines. All agency APPs should contain provisions for the 24 items.

The Office of the Federal Environmental Executive has taken the opportunity to help agencies through the development of a model APP. Originally distributed with 24 items, it is currently being updated to include the 13 proposed new items and should be available in FY 98. The Model APP's are available electronically through the OFEE Website or through Enviro$ense. The Federal Environmental Executive staff will work with each agency, as needed, to ensure the model is used to the agency's best advantage (an outline of the 24 item Model APP is in appendix G).

Vehicle Maintenance Closed-loop Systems- An Example

The DOE operates 4,400 vehicles on the 560 square mile Hanford Site in the State of Washington, resulting in a total of more than 14.5 million vehicle miles traveled per year. Naturally, these activities generate a significant amount of vehicle maintenance waste including approximately 2000 passenger and truck tires per year. To maximize the effi ciency of vehicle maintenance, the Fleet Maintenance Organization, under the leadership of Mr. Loren Martin of ICF Kaiser Fleet Maintenance*, has effectively "closed-the-loop" on tire, used oil, and vehicle battery recycling and procurement.

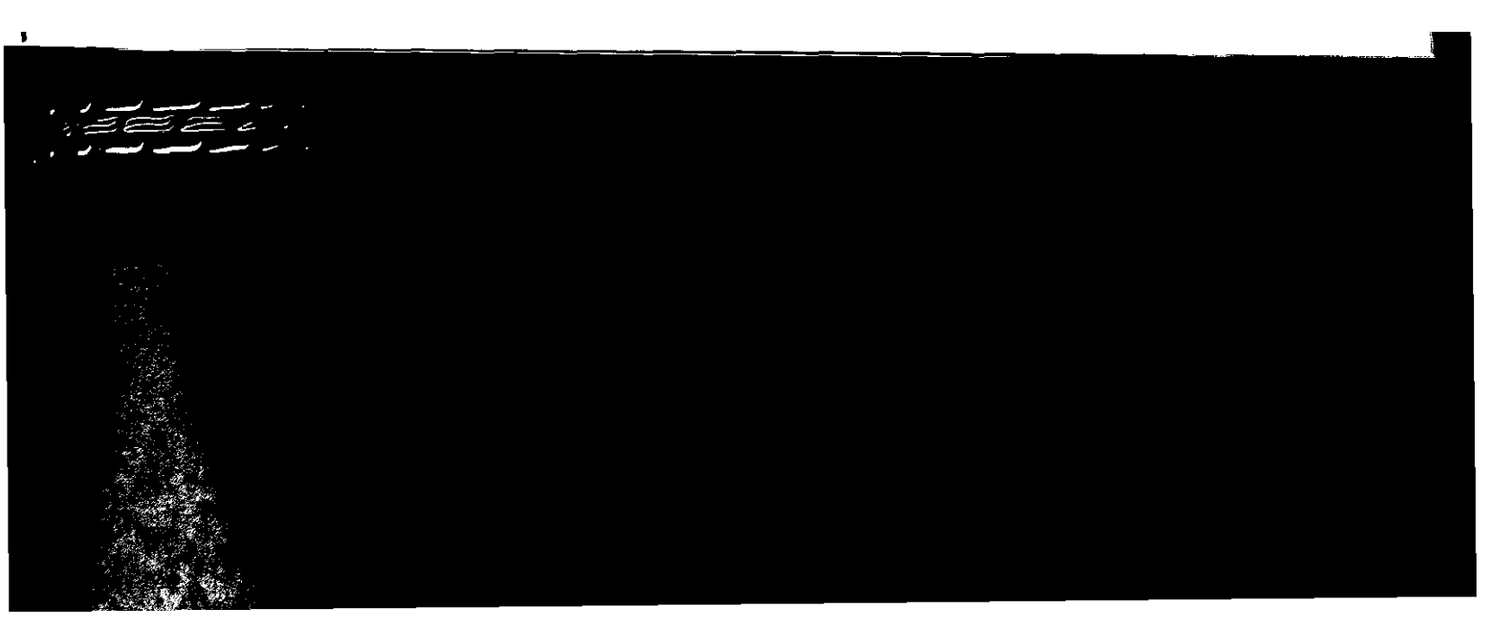
For the procurement of retread tires, the vendors, (Goodyear Tires, and Commercial Tire and Service Center, both of Pasco, Washington), accept old tire casings from Hanford for retreading and provide retreaded tires with a minimum warranty of 40,000 miles. Additionally, all retreads, repairs, materials, and methods meet or exceed GSA's Qualified Products List (QPL) standards. The old tire casings are periodically sent to the vendors where they accumulate until Hanford requests a new order of retread tires. Hanford receives back $25 per tire casing. The new tread is installed on Hanford-owned casings and returned to the site within 3 working days. The retread tires are re-acquired without a casing cost, saving the taxpayers as much as $160 per tire for the large tires,

In addition, if the casings are inadequate for retreading (e.g., damage to the side-wall, etc.), the tire casings are shredded and used as fuel supplements, primarily in cement kilns. The core tire is therefore, either retreaded or recycled and is never disposed in the landfill. Approximately 2,000 tires are returned to the vendor annually, saving an average of $11 per tire in disposal and replacement costs. This use and reuse reduced the number of new tires and related emissions as well as the energy use required for manufacturing. Total taxpayer savings can be as much as $196 per tire used.

Finally, as a result of the Used Oil Summit convened by the Office of the Federal Environmental Executive in December 1994, GSA granted a variance to the Hanford Site to use re-refined oil in GSA vehicles on a test basis.4 The re-refined oil is provided as part of a closed-loop system requiring the re-refined oil supplier to accept all automotive waste oils from Hanford, re-refine them, and sell them back to Hanford as a useable product. Prior to the institution of this program, the used automotive oil from Hanford was sent off-site to a vendor for energy recovery at a cost of $0.21 per quart or $547,144 per year. Now, Fleet **Maintenance not only purchases re-refined oil, but** also sends it off site for re-refining. Although the re-refined oil costs $0.01 more per quart, the hauling and energy recovery costs are avoided, resulting in an overall savings of $0.20 per quart.

For additional information, please* **contact *Mr. Loren Martin at (509) 376-8743.*

'This was prior to the change in GSA's policy on the use of re-refined oil in GSA owned vehicles (See Appendix E).



Part 5

Standards, Specifications, and Designations of Items

Sec. 501.
Specifications, Product Descriptions, and Standards. Where applicable, Executive agencies shall review and revise Federal and military specifications, product descriptions, and standards to enhance Federal procurement of products made from recovered materials or that are environmentally preferable.

Sec. 502.
Designation of Items that Contain Recovered Materials. In order to expedite the process of designating items that are or can be made with recovered materials, EPA shall institute a new process for designating these items in accordance with RCRA section 6002(e) as follows: (a) EPA shall issue a Comprehensive Procurement Guideline containing designated items that are or can be made with recovered materials.

Sec. 503.
Guidance for Environmentally Preferable Products. In accordance with this order, EPA shall issue guidance that recommends principles that Executive agencies should use in making determinations for the preference and purchase of environmentally preferable products.

Sec. 504.
Minimum Content Standard for Printing and Writing Paper. Executive agency heads shall ensure that agencies shall meet or exceed the following minimum materials content standards when purchasing or causing the purchase of printing and writing paper;

For high speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, and white woven envelopes, and for other uncoated printing and writing paper, such as writing and office paper, book paper, cotton fiber paper, and cover stock, the minimum content standard shall be no less than 20 percent postconsumer materials beginning December 31, 1994. This minimum content standard shall be increased to 30 percent beginning on December 31, 1998.

Sec 505.
Revision of Brightness Specifications and Standards. The General Services Administration and other Federal agencies are directed to identify, evaluate, and revise or eliminate any standards or specifications unrelated to performance that present barriers to the purchase of paper products made by production processes that minimize emissions of harmful byproducts. This evaluation shall include a review of unnecessary brightness and stock clause provisions, such as lignin content and chemical pulp requirements.

Sec. 506.
Procurement of Re-refined Lubricating Oil and Retread Tires. Within 180 days after the effective date of this order, agencies shall implement the EPA procurement guidelines for re-refined lubricating oil and retread tires.